

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FI	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,037	02/23/2004		Peter Jannick	037110.52895US	3798
23911	7590	11/17/2005		EXAMINER	
CROWELL & MORING LLP INTELLECTUAL PROPERTY GROUP			LEUNG, RICHARD L		
P.O. BOX 14		OLEKTI GROOT		ART UNIT	PAPER NUMBER
WASHINGTON, DC 20044-4300				3744	

DATE MAILED: 11/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No. Applicant(s) Office Action Summary Examiner Art Unit The MAILING DATE of this communication appears on the cover sheet with the correspondence Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY	address
Office Action Summary Examiner Richard L. Leung The MAILING DATE of this communication appears on the cover sheet with the correspondence Period for Reply	address
Richard L. Leung 3744 The MAILING DATE of this communication appears on the cover sheet with the correspondence Period for Reply	
The MAILING DATE of this communication appears on the cover sheet with the correspondence Period for Reply	
Period for Reply	
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY	(20) DAYC
 WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this. Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). 	
Status	
 1) Responsive to communication(s) filed on 11 October 2005. 2a) This action is FINAL. 2b) This action is non-final. 	
3) Since this application is in condition for allowance except for formal matters, prosecution as to t	the merits is
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.	
Disposition of Claims	
 4) ☐ Claim(s) 1-5 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) 2,3 and 5 is/are allowed. 6) ☐ Claim(s) 1 and 4 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement. 	
Application Papers	
 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a) Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form 	CFR 1.121(d).
Priority under 35 U.S.C. § 119	
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this Nation application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 	ial Stage
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (Function of Informal Patent) 6) Other:	PTO-152)

Application/Control Number: 10/783,037 Page 2

Art Unit: 3732

DETAILED ACTION

1. Upon further consideration, the final rejection of July 11, 2005 is withdrawn. The amendment filed October 11, 2005 has been entered. The indicated allowability of claim 4 has been withdrawn, and the following is the action on the merits.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 00/36046 (Dournel et al.) Dournel et al. disclose a refrigerant consisting essentially of 1,1,1,3,3-pentafluorobutane (page 6 line 2). Dournel et al. expressly disclose the application of said refrigerant in cooling systems comprising a turbocompressor that compresses a refrigerant (page 11, lines 18-24). It is understood that such turbocompressor cooling systems inherently operate by compressing the refrigerant and allowing the refrigerant to expand in heat exchange relation with the material to be cooled, as is well known in the art.

Application/Control Number: 10/783,037 Page 3

Art Unit: 3732

Allowable Subject Matter

4. Claims 2, 3, and 5 are allowed.

Response to Arguments

5. Applicant's arguments filed October 11, 2005 have been fully considered but they are not persuasive. Applicant argues the prior art refrigerant having 1,1,1,3,3-pentafluorobutane in combination with a fluoro compound; however, it is noted that the prior art also shows a refrigerant of 99% 1,1,1,3,3-pentafluorobutane with 1% methanol.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 5076064 (Kopko): discloses a method for replacing refrigerants in a centrifugal compressor.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard L. Leung whose telephone number is 571-272-4811. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl J. Tyler can be reached at 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/783,037 Page 4

Art Unit: 3732

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Richard L. Leung Examiner Art Unit 3744

Melba Bungeiner MELBAN. BUMGARNER PRIMARY EXAMINER